The Uniform Laws and Regulations for commercial hydrogen measurement shown below was excerpted from the 2011 edition of NIST Handbook 130 "Uniform Laws and Regulations in the Areas of Legal Metrology and Engine Fuel Quality" as adopted in July 2010 by the 95th National Conference on Weights and Measures, Inc. (NCWM)¹. A copy of the entire Handbook 130 is available for download at http://ts.nist.gov/WeightsAndMeasures/pubs.cfm.

The purpose of these Uniform Laws and Regulations is to achieve, to the maximum extent possible, uniformity in weights and measures laws and regulations among the various states and local jurisdictions in order to facilitate trade between the states, permit fair competition among businesses, and provide uniform and sufficient protection to all consumers in commercial weights and measures practices.

IV. Unform Regulations

B. Uniform Regulation for the Method of Sale of Commodities

Section 2. Non-food Products [NOTE 1, page 107]

2.32. Retail Sales of Hydrogen Fuel (H).

- **2.32.1. Definitions for Hydrogen Fuel.** A fuel composed of the chemical hydrogen intended for consumption in an internal combustion engine or fuel cell.
- **2.32.2. Method of Retail Sale and Dispenser Labeling.** All hydrogen fuel kept, offered, or exposed for sale and sold at retail shall be in mass units in terms of the kilogram.

The symbol for hydrogen vehicle fuel shall be the capital letter "H" (the word Hydrogen may also be used).

2.32.3. Retail Dispenser Labeling.

- (a) A computing dispenser must display the unit price in whole cents on the basis of price per kilogram.
- (b) The service pressure(s) of the dispenser must be conspicuously shown on the user interface in bar or the SI Unit of Pascal (Pa) (e.g., MPa).
- (c) The product identity must be shown in a conspicuous location on the dispenser.
- (d) National Fire Protection Association (NFPA) labeling requirements also apply.
- (e) Hydrogen shall be labeled in accordance with 16 CFR 309 FTC Labeling Alternative Fuels.

2.32.4. Street Sign Prices and Advertisements.

(a) The unit price must be in terms of price per kilogram in whole cents (e.g., \$3.49 per kg, not \$3.499 per kg).

¹ The NCWM is supported by the National Institute of Standards and Technology (NIST), which provides its Executive Secretary and publishes its documents. NIST also develops technical publications for use by weights and measures agencies; these publications may subsequently be endorsed or adopted by the NCWM.

(b) The sign or advertisement must include the service pressure (expressed in megapascals) at which the dispenser(s) delivers hydrogen fuel (e.g., H35 or H70).

(Added 2010)